

Office of the
Chief Information Officer



WASHINGTON STATE
Recreation and
Conservation Office



Statewide Trails Database Project Update

GIS Day 2014

November 19, 2014



Team

Executive Sponsors

- ✦ Darrell Jennings, Recreation and Conservation Office
- ✦ Joy Paulus, Office of the Chief Information Officer (OCIO)

GIS Technical Lead

- ✦ Jenny Konwinski

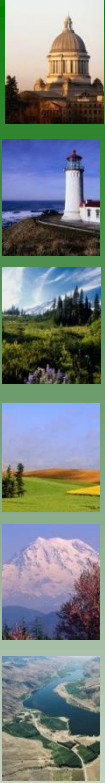
GIS Data Editors

- ✦ Reid Ammann
- ✦ Michael Hammond

Outreach

- ✦ Katz Kiendl





Overview

- ✦ Multiple state agencies manage and/or need recreational trails information.
- ✦ No comprehensive statewide, state-owned recreational trails database exists.
- ✦ Began as a part-time volunteer/intern effort in January 2014. Officially started in September 2014.
- ✦ Currently collecting data from various sources and building a standardized geospatial database suitable for both staff and the public to use and update.



Management

- ✦ Team members are based in various locations around the state.
- ✦ Communicate primarily through Kerika, a collaborative tool which allows information sharing and progress tracking.
- ✦ Also hold short weekly telephone or WebEx conferences to review progress and address issues which need detailed discussion.



Database Design

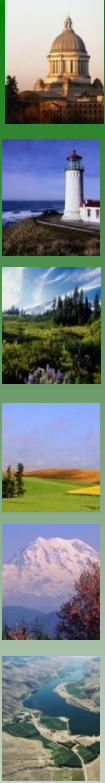
- ✦ Using Esri's ArcGIS Platform.
- ✦ Native data structure is the geodatabase.
- ✦ Standards-based FGDC metadata and a data dictionary will be available.
- ✦ Presently concentrating efforts on named trails which can be associated with local, state, or federal organizations.



Technical Details

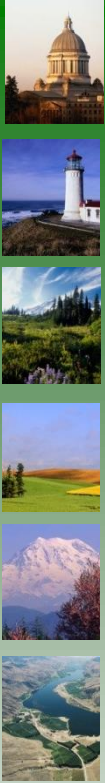
- ★ The primary geodatabase is managed in a Microsoft SQL Server Express database and served as feature services from an ArcGIS Server site hosted in Amazon Web Services.





Technical Details Continued

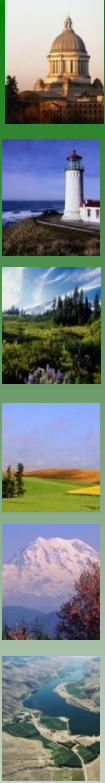
- ✦ Editors use ArcMap to update feature geometry and attributes in the feature services.
 - ✦ Create a local copy of assigned work area features
 - ✦ Edit the local copy features
 - ✦ Flag features for further review and editing as needed
 - ✦ Sync the edited features with the feature service
 - ✦ The feature service writes the edits to the geodatabase



Technical Details Continued

- ✦ After the data has been reviewed and accepted, the workgroup ArcGIS Online project status tracking feature service will be updated.
- ✦ Other feature services will be made available as well as areas are completed.

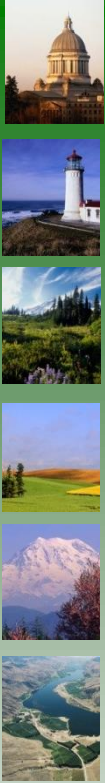




Challenges

- ✦ Because project resources are limited, flexibility and creativity have been key to overcoming technical issues.
- ✦ Application administrator assistance – Repurposing and reconfiguring an existing shared ArcGIS Server site
- ✦ Software licensing and workflow – Sharing licenses and adjusting schedules in order to provide as much editing time as possible for as many people as possible





Next Steps

- ✦ Software engineers from OCIO will be developing a crowdsourcing application geared toward recreational associations and other parties interested in trails data.
- ✦ If funding allows, GPS data may be incorporated during future phases of the project.





For More Information...

The screenshot shows a web browser window with the URL <https://ocio.wa.gov/initiatives/statewide-trails-database-project>. The page features a green header with a feedback message and the Office of the Chief Information Officer logo. A dark blue navigation bar contains links for Home, About, Initiatives, Policies, News, and Calendar. The main content area is titled 'Statewide Trails Database Project' and includes a sidebar with a list of initiatives. The main text explains the project's goal to create a statewide trails database and lists project goals.

Help us improve our website. Please use the Feedback tab to the right or email ocio@ocio.wa.gov

Office of the
Chief Information Officer
Washington State

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Initiatives

- Washington Master Addressing Services (WAMAS)
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- Enterprise Portfolio Management (EPM)
- Project Portfolio Management
- Technology Business Management (TBM)
- Innovation Labs
- Open Data
- Washington Business One Stop
- Washington OneNet | FirstNet
- Statewide Trails Database Project**

Statewide Trails Database Project

[Home](#) » [Initiatives](#) » Statewide Trails Database Project

Washington is still missing a statewide trails database....

To date, some of the state and federal hiking, biking, horse and rail trails data have been compiled into a simple GIS dataset but it's still missing valuable county, city and state attributes about those trails. This project is the first step to building a complete map and database that can be added to and improved on over time. With the use of on-line collaboration tools and grant funding from the Recreation and Conservation Office in Olympia, land management agencies, and interested members of the public, will be able to contribute information into a single source of the best compiled trails data from all levels of government.

Why Now?

With the establishment of National Trails Data Standard in 2008, the popularity of GPS embedded devices (think of your camera or smart phone), and the increasing use of social media sites, crowd sourcing information has become more readily available. Given that the technology, participation, and standards are there, we want to make the most of this opportunity and use our collective resources to aggregate this data.

Project Goals:

- Collect as much existing trail data into a single database, in accordance to National Trails Data Standard;
- Connect as much existing line work as possible in order to display an accurate and up-to date inter organizational trails network;
- Fill in as much missing feature data, from already compiled sources; and
- End up with a database that is sustainable and user friendly for future use and maintenance by the managing organizations.

Resources

feedback



Examples

★ Kerika

★ ArcGIS Online





Thank You!

★ Questions?

